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DISEASES OF CATTLE.

BY THE EDITOR.

In our paper of Nov. 16th, No. 16, p. 126, we proposed "to give articles from the most approved authors, relating to the diseases of cattle, horses, swine, sheep, &c. and we now proceed to carry that proposition into effect.—We would premise, however, that we have no knowledge of this subject derived from practice, and shall merely select such articles as we think may prove useful, from treatises, which appear to have been correctly and judiciously written, and have met with the approbation of men of science on both sides of the Atlantic. We shall sometimes alter the language of the authors, whose ideas we may adopt, for the sake of brevity, and to make the subjects plain to readers who are not acquainted with medical and anatomical terms; but we hope to retain the meaning whenever we vary the phraseology. We shall, occasionally, intersperse our extracts with remarks of our own, derived, principally, from conversation with practical farmers, and others, who possess the kind of knowledge which is most to be relied on, to wit, that which is derived from experience. We are fully sensible of the importance of the subject, and know that improper prescriptions may not only cause the loss of much valuable property, but may subject many poor animals to cruel as well as absurd treatment. We shall therefore assert nothing relative to the symptoms or cure for diseases of cattle which is not supported by respectable authority; and should we be so unfortunate as to lead our readers astray, it will be owing to the fallibility of the most competent guides we could find to direct our course.

The following observations by Mr. Lawrence, an English writer of reputation, might very well precede every treatise on Cattle Medicine or Farriery. "It should be considered that animals, living in a state of nature, regulated by the reason and experience of man, might be wholly exempt from disease—that their appetites, unlike our own, may be held under constant control—that their diseases result purely from the negligence or erroneous treatment of their owners. They are either exposed too much to the rigors and changes of the weather, or they are gorged with food, denied a sufficient quantity, or supplied with such as is unwholesome. Here we learn the chief causes of their maladies. LEARN TO PREVENT THEM, instead of undertaking the tedious, unsuitable, and often hopeless task of learning to cure them. I have no infallible receipts to offer; on the contrary, I wish to impress my readers strongly with the idea, that all *infallible receipts are infallible nonsense.*"

Inflammatory Fever, or general Inflammation; called also Quarter Evil, Black Quarter, or Spud.—This disease frequently happens to young cattle, generally between the first and third year, most commonly about the second year of their age. It appears to be occasioned by feeding them too hastily; by putting them, when in a lean state, into rich succulent pasture.

The animal when seized with this complaint, becomes suddenly listless and stupid; he hangs down his head, refuses his food, and appears to move with difficulty. Swellings soon appear in different parts of the body, which, when pressed by the finger, make a crackling noise. Sometimes the joints are particularly affected; at others, the swelling appears on the back, shoulder or belly.

The disease attacks rather suddenly, and often proves fatal, particularly when proper remedies are not speedily employed. Bleeding is the first remedy, and must be proportioned to the age and strength of the animal; perhaps from three to four quarts will generally be found sufficient. The blood should always be measured. The following purgative should then be given.

Aloes - - -	3 dr.
Potash - - -	2 dr.
Sulphat of Soda [Glauber's Salts]	6 oz.
Warm Water - -	1 pt.

Mix for one dose.

This dose will generally be found sufficient for an animal of two year's old. Should the disease occur in situations, where these medicines cannot be procured, give from four to six ounces of common salt in a pint of water; the addition of four ounces of castor oil, sweet oil, or even linseed oil, will make it more efficacious. Should the animal be relieved, by this treatment, considerable weakness may follow; for which give the following twice a day:

Powdered Caraway seeds,	1 oz.
Ginger - -	2 dr.

To be given in a pint of oat-meal gruel [or any other gruel] or ale.

The swollen parts, particularly if the joints are affected, should be rubbed with the following liniment:

Take of linseed oil -	4 oz.
Oil of turpentine -	2 oz.
Liquid ammonia, or spirit of sal ammoniac - -	1 oz.

Mix.

Mr. Lawrence has very properly advised that a piece of short or inferior keep should be reserved, as a digesting place, where cattle may occasionally be turned, to empty and exercise themselves. This is better than bleeding, or any medical preventive; and as this disease frequently proves fatal, preventive measures should never be lost sight of.

Murrain or Pest.—These terms correspond with that of plague in the human species, (and the diseases are said to have a similar origin, to wit, in putrid miasmata,) and like the plague is attended with boils or buboes. The plague of horned cattle is said to be of a peculiar nature, and not communicable to other animals. Yet in a contagious disposition of the air, it may chance that various species of animals may be affected at the same time. The infection is first denoted by a decrease of appetite, difficulty of swallowing, shaking the head, hanging down of the ears, and dulness of the eyes. Constant diarrhœa, or scouring, fœtid breath, nauseous steams from the skin, infecting the surrounding air. The blood is florid, hot, and frothy, and the urine high colored. Roof of the mouth ulcerated. Tumors or biles are felt under the fleshy membrane of the skin; eruptions all along the limbs, and about the bags of the cows. Milk dries up suddenly. The animals groan much, and are worse towards evening, mostly lying down. These symptoms continue increasing until the seventh day, in which, generally, although sometimes protracted to the ninth, the crisis or turn takes place.

Dr. Darwin proposes, when this distemper makes its appearance, to slaughter all the cattle within five miles of the infected place, which appears to be a very harsh mode of proceeding; and although "death's a cure that never fails," such a remedy is commonly thought to be as bad as the disease. Mr. Lawrence advises, on the appearance of the distemper, to place the whole herd under the best shelter that circumstances will allow; to separate those which are in the most advanced stage of the disease, and slaughter such as good judges shall deem to be in a state too dangerous for any attempt to cure, and bury them pretty deep in the ground. In a disease so highly putrid, bleeding should be moderate, yet in the beginning, he thinks it will be necessary, as also setons and rowels. "If costiveness prevail, the body must be kept open by clysters, or the most moderate purges, but a scouring is the most usual symptom. The sick-house must be sufficiently airy, yet well defended from wet and cold. Acid fumigations will purify the atmosphere of the house, and probably the fumes being inhaled by the beasts will have a favorable effect."

"The *emphysema*, windy abcess, or puffing up of the hide, filled with a thin putrid matter and foul air, which nature furnishes in the last stage, as a mean of throwing off the disease, must be opened at full length, wherever situated, and the matter discharged. The cavity to be filled with pledgets of tow, dipped in tincture of myrrh, or of an ointment composed of powdered turpentine and yolk of eggs. Poultices of oatmeal, stale beer, &c. may be necessary to bring the ulcers to a proper digestion. Nitre has, of late, been successfully used in gangrenous ulcers, the cavities being filled with it. The approach of mortification is indicated by the dark and flabby appearance of the inside of the mouth, coldness, insensibility, blackness and ill scent of the dung, sanious and foul discharge from the mouth and nose, and dulness of the eyes. On the return of health, mild, cleansing purges will be necessary, but the danger of mortification must be fairly passed. The recovered beast must not be suddenly exposed to the air, but only turned out a few hours in the middle of the day, particularly throughout winter. Sudden exposure has subjected many convalescents to a vertigo of giddiness, and to consumption."

M. Sauvages, the celebrated professor of Medicine at Montpelier, was an accurate observer of this disorder, when it raged with great violence in many parts of Europe. He calculated that of twenty who were attacked by it nineteen died; that no certain remedy had been

discovered, or any effectual mode of preventive, except separating the healthy from the sick; he recommends, however, bleeding and purging at the commencement of the disorder, with setons in the dewlap. After the operation of the purgative, he considers opiates, aromatics, &c. such as caraway seeds, ginger, cascarilla, &c. as the most proper medicines.

A writer in the Gentleman's Magazine, quoted with approbation, by Dr. W. Peck, a late learned and judicious writer on veterinary medicine gives the following directions to prevent and cure the disease.

First. Avoid the infection with the utmost diligence. *Secondly.* Trust to none of the celebrated remedies that may be proposed to you, unless founded on experience; most that have been offered by farriers are known to be ineffectual, and many of them extremely injurious. *Thirdly.* If your cattle are attacked, bleed plentifully, repeatedly, and keep their bodies open. *Fourthly.* Give them no dry meat from the commencement of the attack till the fever abates; let their mashes be thin, given warm, and very often, a little at once; keep them dry and warm. *Fifthly.* Give no warm spicy drenches, at the commencement of the disease.

The following extract from an English work is illustrative of the infectious nature of this disorder:

"A farmer in Essex, who had the distemper among his cows, invited a neighboring farmer to come and assist him in giving drenches to some of his sick cattle; the good natured man went accordingly and spent the best part of the day with his neighbor, to lend him his help in distress, little dreaming of the ill consequence of being so many hours with the diseased cows; so much of the infectious effluvia adhered to his clothes, that, as he was walking home, though a mile and a half, through a field in which several of his cows were feeding, he no sooner entered, but they left off grazing, ran to the further end snorting and flinging up their noses as though they smelt something very disagreeable; and so indeed it proved to them, for the very next day, many of them fell sick, and died in a few days."

(TO BE CONTINUED.)

From the Plough Boy.

MR. SOUTHWICK,

It appears from our statute books, that our state has appropriated about one and a half millions of dollars, for the benefit of colleges and academies. This amount has gone almost exclusively for the education of young men designed for the professional and mercantile classes. And what has been done for the education of Plough Boys,—whose productive labors are the life-blood of our commerce, the sinews of our manufactories, and the food and raiment of our professions? Comparatively nothing. It is ardently to be hoped, that the example of Virginia, prompted as it is by the intelligent mind of a Madison, will awaken our legislature to a just sense of the importance of establishing a school of agriculture. I have no doubt but it would tend, more than any other measure, to improve our husbandry; and that the increased tolls upon our canals, which it would cause, by increasing the productions and profits of our farms, would remunerate the state, in ten years, the whole expense of the establishment.

You have said there is at least *one* establishment of this kind. I presume you allude to that of M. Fellenburgh, at Hofwyl, in Switzerland. This school affords a demonstration not only of the practicability, but of the usefulness, of teaching, conjointly, the theory and practice of agriculture. So high has its reputation become, that many of the young German noblemen are sent to M. de Fellenburgh for instruction; and his pupils receive extravagant salaries as managers upon many of the great estates on the continent. I advise you to procure and publish an account of the institution. It may be found in one of the Edingburgh Reviews; I think, in the volume for 1817. There is also a report of it, made to the Emperor of Russia, in 1814, by the Count de Capo d'Istria; a pamphlet by M. Pictet, of Geneva, and considerable said in its commendation by Mr. Brougham, in a report to the commons of Great-Britian, made in 1818, on the subject of education. Mr. B. spent some time at Hofwyl. But this is not the only school. In a volume of recent travels through Hungary, Dr. Bright enumerates six or eight, and says there are others, which have been established in the Austrian dominions, by the government and by individuals, on the Hofwyl plan. Accum, the well known chemist, has recently received an appointment in a similar school, from the King of Prussia.

But why seek for European precedent? We have a double inducement for such a school here. It will give us good *statesmen* as well as good *farmers*. We want farmers whose education will qualify them to speak in our legislative halls, to draft bills and reports, and to discharge the duties of any of our public offices. We want the yeomanry of our state to possess the influence which their numbers and republican virtue entitle them to; and we wish to instruct them, that their influence may be directed to public good. COLUMELLA.

On the means of promoting the growth of Young Fruit Trees, particularly in grass land. By the Rev. Mr. Germershausen.

From the Transactions of the Economical Society of Leipsic.

When young trees stand in grass-land, or in gardens where the earth is not dug up every year around them, and freed from weeds, they do not at first increase properly in growth, and will not thrive so well as those which have been planted in cultivated ground. It has been remarked also, in orchards, that the more the ground becomes grassy, and, as it were, converted into turf, the fruit is smaller and not so well tasted. The latter circumstance takes place particularly with regard to plums.

Having planted several young plum trees, I covered the ground, for some years, around the trunks, as far as the roots extended, with flax-shows,* by which means these trees, though in a grass-field, increased in a wonderful manner, and far excelled others planted in cultivated ground. As far as the shows reached, the grass and weeds were choaked; and the soil under them was so tender and soft, that no better mould could have been wished for by a florist.

When I observed this, I covered the ground with the same substance, as far as the roots extended, around an old plum tree, which appeared to be in a languishing state, and which stood in a grass field. The consequences were, that it acquired a strong new bark; produced larger and better tasted fruit; and that those young shoots which before grew up around the stem, and which it was every year necessary to destroy, were prevented from sprouting forth, as the covering of flax-shows impeded the free access of air at the bottom of the trunk.

Last year I transplanted from seed-beds, into the nursery, several fruit trees; the ground around some of which I covered, as above, with flax-shows. Notwithstanding the great heat of the summer, none of those trees where the earth was covered with shows, died or decayed; because the shows prevented the earth under them from being dried by the sun. Of those trees around which the ground was not covered, as before mentioned, the fourth part miscarried; and those that continued alive were far weaker than the former.

The leaves which fall from trees in autumn may also be employed for covering the ground, in like manner: but stones, or logs of wood, must be laid on them, to prevent their being dispersed by the wind. In grass land, a small trench may be made around the roots of the tree, when planted, in order to receive the leaves. If flax shows are used, this is not necessary; they lie on the surface of the ground so fast as to resist the force of the most violent storm. The leaves which I have found most effectual, in promoting the growth and fertility of fruit trees, are those of the walnut tree.—Whether it is, that, on account of their containing a great abundance of saline particles, they communicate manure to the ground, which thereby becomes tender under them; or that they attract nitrous particles from the atmosphere; or that, by both these means, they tend to nourish the tree, both above and below.

Those who are desirous of raising tender exotic trees from the seed, in order to accustom them to our climate, may, when they transplant them, employ flax-shows with great advantage. This covering will prevent the frost from making its way to the roots; and rats and mice, on account of the sharp prickly points of the flax shows, will not be able to shelter themselves under them.

Tan or the refuse bark which has been used by tanners, has been recommended for the same purpose for which flax shows are advised as above. Tessier's Annals of Agriculture advise to use the breakings or refuse of hemp in the manner above directed. Wood ashes and slacked lime are likewise stated to be useful, not only for manure, but for the destruction of insects. It would be well if trials were made of all these substances, on different trees in the same orchard, and the results of such trials noted and published for the benefit of the community.—*Ed. N. E. Farmer.*

*Shows are the refuse of flax when it is scutched or hackled.

From Sinclair's Code of Agriculture.

Rollers.—The roller is the most useful implement for breaking hard clods expeditiously, and smoothing the surface of land when in tillage, ever yet invented. It is likewise of use to grass lands laid down for hay; and heavy rollers would prevent those ant hills, by which so many pastures are deformed. Rollers are

made of various substances; as wood, freestone, granite or cast iron; but on the whole the two latter are to be preferred. It is of importance, that the weight of the roller should be in proportion to the surface on which it is to be employed. The best plan, is that of having two rollers, each about two feet and a half in length, and both placed in one frame, so as to roll clear of one another. This is the most suitable both for corn crops and sown grass, as it neither tears up the tender soil, nor injures the young plants. Besides the labor in turning is much less severe on the frame and on the cattle. Every farm ought to be provided with rollers of different diameters and weights, so as to suit the several purposes to which they are destined; those of a small diameter are generally applied to land in tillage; and those of a large diameter, with double shafts, to grass land. Heavy rollers are of great use, for destroying worms, slugs, and other vermin in the soil.

An intelligent farmer maintains, that if draining is the first, manuring the second, and cultivation the third, rolling ought to be considered the fourth principal operation in the processes of agriculture.—Its importance indeed, is becoming more apparent, and new advantages are derived from its use both on arable and on grass lands.

Wheat should always be rolled in the Spring, after frosts, as it makes the soil adhere more closely to the roots of the plants, encourages vegetation and strengthens the stems, and renders the grain more perfect. When any crop is sown with artificial grasses, rolling is particularly necessary, to make an even surface, bruising all clods, and pressing down any stones it may not be thought necessary to carry off, to facilitate the future operation of the scythe. Oats in a light soil, may be rolled to advantage, immediately after the seed is sown, unless the ground be so wet as to cling to the roller. After turnips are sown in drills, they ought to be immediately rolled, to make the soil compact, and to promote their speedy germination. Not only for turnips, but for all other crops, rolling, particularly during the night, is found to be an efficient means of destroying slugs, snails, the wire worm, and other vermin, so destructive to young plants. Flax ought to be rolled immediately after sowing; it makes the seed vegetate equally, and prevents after growth; the bad effects of which are visible in every step of the process for dressing flax.

The other advantages for rolling arable land are, that it renders a loose soil more compact and solid. This encourages the growth of plants, by pressing the soil to their roots. It likewise keeps in the moisture, and prevents drought from penetrating. When the soil is worked up lightly, moisture either filters thro' it too quickly, or is easily evaporated. In a dry season this may occasion a very material difference in the crop, more especially in a light soil. Rolling is executed to most advantage across the direction of the ridges, because more adapted to ensure full benefit to the furrows which otherwise may not be properly gone over.

When a large field is to be rolled, a number of rollers ought at once to be set at work, otherwise an opportunity may be lost never to be regained.

It has long been considered, as an incontrovertible proposition, and approaching to the nature of an axiom, "That whoever could make two ears of corn, or two blades of grass, to grow upon a spot, where only one grew before, would deserve better of mankind, and do more essential service to his country, than the whole race of politicians put together."

There never was a greater instance of sophistry, than this doctrine of Swift's, who seems not to have been at all aware, of the immense benefits, conferred upon agriculture, by a judicious system of civil policy. In fact, the prosperity of agriculture, *depends upon the politician.* The better and more equitable the civil policy of a country, the more perfect will its agriculture become. Those politicians or statesmen, therefore, who, by removing every obstacle, and furnishing every proper encouragement to agriculture, promote its advancement, have a higher claim to the gratitude of mankind, than those who have merely performed a secondary or practical part, which part, they never could have performed at all, but under the protection of wise laws, regularly administered, and executed with impartiality and vigor.—*Ibid.*

Rules to be observed regarding the 'Improvement of Waste Lands.

In the cultivation of wastes, the following rules are laid down by the most successful improvers.

1. Not to put in practice any scheme of improvement, without the fullest deliberation, nor without the command of an adequate capital.

2. Not to begin on too great a scale, nor until, by experiment it be found, that the design is suitable to the soil, situation and climate.

3. When the intention is to cultivate peat-moss, not to begin cropping, till at least one season after the drains are completed, and the soil thoroughly reclaimed from superfluous moisture. In flow or spongy mosses, a longer time is necessary, and it is desirable to expose the soil to the action of the atmosphere, during the frosts of winter.

4. To plough or delve peat-moss in autumn, that it may be effectually exposed to the winter frost and rains, and not to the summer's heat, which hardens it, and prevents its decomposition.

5. Whatever is done, to do it *effectually;* not to think of laying on four acres, the manure necessary for three; nor the lime, chalk, earth, clay, sand or gravel, upon two acres, that should be employed in covering only one.

6. To carry on the improvement of waste lands, without encroaching upon the dung necessary for the improved part of a farm, as dung ought never to be brought from a good soil to lay upon a bad one. Unless dung therefore can be procured from a neighboring town or village, it will be better to leave the lands in their natural state, except in cases where the soil, by being pared, burnt, limed, or marled, or covered with chalk, clay, earth, &c. will pay the expense of the improvement.

7. The last rule is, to lay down land, improved from waste, more especially in high and bleak situations, as soon as possible into grass, and to retain it in that state as long as it is tolerably productive. For though grain and roots may be cultivated on waste lands, when properly improved, yet grass pastured, particularly by sheep, is principally to be depended on for improving all weak soils, in barren districts. In such cases, it is from grass alone that remuneration can be looked for by the improver of waste lands. Even though soils of this description do not produce grass in much abundance, or of good quality, yet when in pasture they produce something, and a stop is put to farther expenditure.—*Ibid.*

Ditching.—When bushy ground, full of strong roots, is to be ditched, the Rev. Mr. Eliot wisely recommends beginning the ditch in the winter, when the ground is frozen two or three inches deep. The surface may be chopped into pieces by a broad axe with a long helve, and the sods pulled out with an instrument made like a dung croom. The farmer may probably hit upon a good time for this work in December, when there happens to be no snow, and when it will not interfere with other farming business. The lower part of the ditch may be done in the following summer, or autumn. In a free and firm soil, a ditch may be begun with a plough, drawn by an orderly team that will keep to the line. This saves labor.

To make a ditch straight, and equal in all its parts, it is recommended that the work be regulated by a frame of slit deal, nailed together, to the exact size of the intended ditch. It may be a rod or more in length, and as wide as the intended ditch.—*Deane's N. E. Farmer.*

Rice Jelly.—This is one of the best and most nourishing preparations of rice, particularly for valetudinarians or convalescents. It is thus made: Boil a quarter of a pound of rice flour, with half a pound of loaf sugar, in a quart of water, till the whole becomes one uniform gelatinous mass; then strain off the jelly and let it stand to cool. A little of this salubrious food eaten at a time, will be found very beneficial to those of a weakly and infirm constitution.

Chemical Agency by the Magnet.—Mr. J. Murray states, that he had succeeded in decomposing by the magnet, every metallic salt to which he had applied it. One instance of this fact, so interesting to science, we quote for the sake of its tendency. 'A solution of *permuneate* of mercury was, by the magnet, soon reduced to metallic or running mercury.'—Hence fine steel filings, magnetized, administered in syrup, will be an admirable antidote to corrosive sublimate.

London paper.

Sir John Sinclair, in his Code of Health declares that the modern art of Fencing is not only conducive to longevity, but absolutely enlarges the bones of the chest and thorax. *Locke* calls it an essential part of good education.—*Wright* on Elocution, praises it as an auxiliary to Eloquence. *Chatham*, in one of his letters to his nephew, Lord Camelford, assures him, it will place his head upright and plant him well upon his legs.—*National Gazette.*

There is not an earthly beauty that I look upon, that has not something in it spiritual to me. And when my mind is fair and open, and soul right, there is not a flower I see that does not move my heart to feel towards it as a child of God. All that is, to my mind, is a type of what shall be; and my own being and soul seem to me as if linked with eternity.—*Idle Man.*

TO THE EDITOR OF THE NEW ENGLAND FARMER.

Having seen in No. 16 of your paper, a request for some information respecting the cheapest and best mode of clearing heavy timbered new lands—I send you the following: From long experience and strict observation, I am of opinion that the generality of people involve themselves in more than twice the labor and expense necessary for the want of prudent care and attention in falling their timber. Most farmers when they begin in the woods, are in a hurry to have some land cleared; they hire their chopping done by the job, and such choppers, so hired, are only interested in doing it as fast as possible. They generally cut the smallest timber first, fall the trees promiscuously in all directions the way they will go with the least chopping, and the largest trees the last. Then after it has lain a year to dry and the fire been through it, to burn the small brush, the logs lay in all directions; the smaller fast under the larger, and it will then be twice the labor to clear it off, that it would be if nothing had been done, provided they would follow the following directions.

1st. Take a view of all the large trees, and see which way they may be felled, for the greatest number of smaller trees to be felled along side, or on them. After felling the large trees, only lop down the limbs; but all such as are felled near them, should be cut in suitable lengths for two men to roll and pile about the large trees, by which means they may be nearly all burnt up without cutting into lengths or the expense of a strong team to draw them together.

2d. Fell all the other trees parallel and cut them into suitable lengths that they may be readily rolled together without a team, always cutting the largest trees first that the smallest may be loose on the top to feed the fires.

3d. On hill sides fell all the timber in a level direction, then the logs will roll together, and if the trees are felled down hill, all the logs must be turned round before they can be rolled, and there will be stumps in the way.

4th. By following these directions two men may readily heap and burn most of the timber without requiring any teams, and perhaps the brands and remains of the log-heaps may all be wanted to burn up the old fallen trees. After proceeding, as directed, the ground will be clear for a team and sled to draw the remains of the heaps where they may be wanted, round the old logs. Never attempt to either chop or draw a large heavy log until the size and weight is reduced by fire.

The more fire-heaps there are made on the clearing, the better, particularly about the old logs, where there is rotten wood.

The best time of the year to fell the timber, in great measure, depends on the seasons' being wet or dry. Most people prefer having the timber fallen in the month of June, when the leaves are of full size. Then by spreading the limbs and brush over the ground (for it should never be heaped) if there is a very dry time the next May, fire may be turned through it, and will burn the leaves, limbs, and top of the ground so that a very good crop of Indian corn and pumpkins may be raised amongst the logs by hoeing; after those crops come off, the land may be cleared and sowed late with rye and timothy grass, or with oats and timothy in the spring. If what they call a good burn, cannot be had in May, keep the fire out until it can be had in some very dry time in July or August; then clear it off and sow either wheat or rye and timothy, harrowing several times, both before and after sowing, for after the fire has been over the ground, the sod of timothy should be introduced as soon as the other crops will admit, to prevent the briars, elders, fire-cherries, &c. from springing up from such seeds as were not consumed by the fire.

The timothy should stand some 4 or 5 years, either for mowing or pasture, until the small roots are rotten, then it may be ploughed, and the best mode that I have observed, is to plough it very shallow in the fall; in the spring, cross plough it deeper, harrow it well and it will produce a first rate crop of Indian corn and potatoes, and the next season produce the largest and best crops of flax that I have ever seen and be in order to cultivate with any kinds of grain or to lay down again with grass.

These directions are to be understood as relating to what is generally called *Beech Lands*—and the chopping may be done any time in the winter, when the snow is not too deep to cut low stumps, as the leaves are then on the ground. By leaving the brush spread abroad, I have known such winter choppings to burn as well in a dry time in August as that which had been chopped the summer before.

SAMUEL PRESTON.

Stockport, Pa. Dec. 14, 1822.

Report of the Committee of the Hillsborough (N.H.) Agricultural Society, on Agricultural Products.

The committee, appointed to view, on the ground, field products of competitors, have performed the duties of their office agreeably to their instructions. Of eleven, who were chosen as a Viewing Committee, only seven attended to the business of their appointment, viz. Peter Woodbury, William Riddle, Ezra Abbot, Porter Kimball, Phillip Brown, Joseph Cochran, Esqrs. and Humphrey Moore. They began their rout on the 29th July, and completed it on the first of August. They beg leave to make the following Report of their doings.

They commenced their business by viewing the crops and farm of Dr. Thomas Eaton, of Francestown. The products of his fields were all good. But his most distinguishing crop was Wheat, of which he had four and a half acres, and, for the present year, was excellent. The Committee awarded him the first premium for his WHEAT CROP. His POTATOES, growing on 1¾ acres of ground, were well cultivated, and appeared very promising. For these he was considered to be entitled to the second premium. His Indian Corn and French Turnips were very luxuriant; but upon comparison with the same kind of crops of other competitors, they were not esteemed deserving an award.

The farm of Dr. Eaton, containing 280 acres of land, is made up of hills and valleys, and is generally of a warm, free soil. It is well proportioned in respect to woodland, pasturage, mowing, orcharding, and tillage. Order and judicious management marked every department of his Agricultural business. Every thing appeared to be done with calculation and for profit. The extent and conveniences of his barns, out-houses, and the order of his house, shew how delightful may be the situation of a farmer. He consumes the whole of his crops in his family and in his stock; and, sometimes, in addition makes considerable purchases for consumption. That this method should continually add to the fertility of a farm, is not doubted; but whether it will give the greatest nett profit for any given course of years, is submitted to Agriculturalists who love to make experiments, and also love to make calculations.

The Committee next viewed the crops of Messrs. Folsom and Whittle, of Deering. Their OATS, growing on 2½ acres of ground, were generally very heavy, and were considered worthy of the premium offered for the best crop of that species of grain. Their Potatoes, 4½ acres looked very well, but did not excel. Their Wheat, of which there were four acres, was very good, and would have received a premium, had not other fields, in competition, been better. Their farm contained about 400 acres of good land. The soil was strong; but from its close texture, it appeared to be better adapted generally to grass than to grain. The Committee were a little surprised to see, on such a good and extensive farm, keeping 40 head of cattle, and 70 sheep, only 2½ acres of Indian Corn, of no more than ordinary luxuriance. But the great article of this farm and the source of wealth to its owners were stock; which gave evidence of the superior quality of the breed, and the excellence of their keeping. The farm was well managed, and distinguished for some of its well built and permanent fences.

The farm of Mr. William Whittle, of Weare, contains about 200 acres of land of various qualities. His Wheat crop, covering four acres of ground, appeared very well. It has suffered from the early drought. On comparison, it could not command a premium. Seven acres of his ground were planted with Indian Corn. The field was a pine plain; the soil very light; the manuring small. Considering these circumstances the crop commanded attention. The third premium on INDIAN CORN was awarded to him. His farm generally appeared to be under a profitable process of cultivation.

Mr. Peter M'Neil, of New-Boston, has a farm generally hard and uneven. By industry he makes it fruitful and profitable. He offered an acre of WHEAT for examination. The crop was very good, and it was esteemed worthy of the second premium.

Mr. Jacob Hooper, Jr. of New-Boston, offered several crops for examination. They were all good, but none was entitled to a premium excepting his FLAX, for which the first award was made.

His farm, of 200 acres, lies principally on a beautiful hill, whose ascent is easy, and whose soil, though not of the richest quality, was very feasible. His fields were laid out with accuracy and cultivated with the greatest care. The fences were exceedingly well built, and of the most durable materials. Not a bush infested the walls, or headlands; nor a weed of a finger's length encumbered his fields. Not a squirrel or a mouse, could find rubbish enough for a lurking place, from which they might sally forth to make their depredations upon the crops. Ceres might here plant her throne, and rejoice at her success, that she had found one spot on earth where her laws were strictly obeyed. The barn, the granary, and the work shop were in perfect order. The

tools were in repair, and were where they ought to be. The door-yard was free from incumbrances. Not a chip was out of place. The parlor of the hogstye, whose walls and floor were made of well prepared granite, was neat enough for the study, or office of any professional gentleman in the county. The house and the good order of the house, completed the system of neatness and correct management.

The farm of Mr. John Fairfield, of New-Boston, is situated on the east side of a large hill, and is naturally rough and rocky. The acre, which he selected for POTATOES, was a light soil. The crop was luxuriant, and the Committee awarded him the first premium. His other crops appeared very well; and his farm, though generally hard and rocky, gave evidence of industry and good management.

Doctor Matthias Spalding, of Amherst, entered his name as a competitor on Wheat, Indian Corn, and English Turnips. His Wheat had suffered by the drought, was harvested, and the Committee could not examine it. His field of Indian Corn, containing about three acres, was very good. The soil was warm, and light, and well cultivated. The crop was entitled to special notice; but the excellence of other Corn crops prevented it from receiving a premium. His ENGLISH TURNIPS were in a flourishing condition, and promised a large crop. For this product he was considered entitled to a premium.

His farm is small, and the principal part of it is naturally hard. When he made his purchase, much of his land was in a rude, and almost uncultivated condition. But by taking out the stones and making enclosures with good stone walls; by taking up piece after piece, and giving each a thorough cultivation, he has made a large proportion of his farm like a garden. He has proved that the science of Agriculture is adapted to practice; that hard land may be made soft; that poor land may be made rich; and that an unfruitful soil may be made productive. His general method of husbandry improves his land, while it improves his crops.

The farm of Timothy Danforth, Esq. of Amherst, is made up of various soils. His land lying on the Souhegan is very rich and fertile.—His back lands are light and dry. A part of his Indian corn and a part of his oats are very heavy. His field of Potatoes were very good. His RUTA BAGA, growing on nearly half an acre, very flourishing, and promised a valuable crop. The Committee saw fit to honor these with a premium. His method of culture is improving his farm and making it more profitable.

The Committee, as they were passing from Amherst to Wilton, called on the Minister of Milford. After having made the usual examinations, they awarded him a premium for PEAS and BEANS.

They next examined the crops of Capt. Wm. Ramsdell. His farm lies in Milford, bordering on the Souhegan river. He has a large tract of valuable intervale; a good proportion of arable land; and the remainder, pasturage and woodland. The farm contains a variety of soil, which is adapted to a variety of products, which are for the convenience of a family and for the interest of a farmer. His Wheat, in the fore part of the season, was very luxuriant, and promised a first rate crop; but growing on warm land, it was greatly injured by the early drought. His Oats, not offered for a premium, were equal to any that were examined. His field of INDIAN CORN, growing on light, warm land, was extraordinary for that quality of soil; and he was awarded the second premium. His farm is managed with great neatness and good judgment; and every thing about him denotes that he is going *ahead*.

The farm of Mr. James Dascomb, of Wilton, is rough, hard, and rocky. It would require an iron constitution, and a resolution, not to be broken or bent, to live upon it. On the eastern declivity of his farm, he has a field of INDIAN CORN, containing four acres. The soil is as strong as stones can make it. It appears as if the pavements of nature were broken up.—Amidst this seeming wreck of rocks, the Corn is of uncommon size. Though the hills were made at a usual distance from each other, the Corn was so thick that it was difficult to walk among it. There were stalks more than 10 1-2 feet in height, and well eared. The Committee were pleased to award him the first premium; and they could only regret that it was no larger.

The Committee went next to Mr. Oliver Whiting's, of Wilton. There they examined a field of BARLEY, containing five acres. It was a fine crop. It was estimated that it would yield 40 or 45 bushels per acre. It far exceeded any other Barley crop, which was offered. The premium was awarded to him. His farm contains more than 700 acres of land. Though he is a man of but little more than 40 years of age, he has acquired the principal part of it by hard labor and good management.

The foregoing awards were made after the Committee had examined the products of all the competitors; and they were made according to the best of their judgment; and generally with unanimity. Though each competitor did not excel in every thing; yet they all excelled in something, and no one has the mortification to have his hopes blasted, nor his ambition checked.

The Committee are decidedly of opinion, that the present method of awarding premiums on Agricultural products is wisely chosen, and that it will promote the great object of our Society. There is an equal chance for all; and the members will cease to fear to strive, when they find that there is no injury attending a defeat.

The task, which the Committee has performed, though laborious, and at a season somewhat inconvenient, was a pleasant and improving one. The hospitality of a farmer's board, drawn from the resources of his own soil, was calculated to gratify the taste of men, who had a relish for a farmer's life.

The committee were not unobserving travellers as they passed from town to town. They noticed the farms, which lay within their view, and their distinguishing peculiarities. Many were excellent; and generally they were considered to be in an improving condition. It was with painful anxiety the Canada Thistle was observed on the sides of roads upon the high lands, and upon the banks of streams, lest that winged evil should visit and afflict this part of the county. Here and there a bush thrust itself through a breach in the fence; now and then an old hat or a bundle of rags looked contemptuously through a broken pane of a window, and by their looks hinted as if they would appear in our next legislature, and raise their voice against the existence of Societies, which were established to destroy their rights and privileges.

The most prominent defect, which was observed among the farmers, was their neglect of making Manure. With a very few exceptions, they did not appear to make any more than what they could not easily avoid making. Till this defect is remedied; till manure is considered the basis of good husbandry, Agriculture will keep far behind the other arts.

All which is respectfully submitted by your Committee.

HUMPHREY MOORE, *for the Committee.*
September 24, 1822.

From the London Farmers' Journal.

On the comparative merits of the Improved Short-Horns and Hereford Cattle.

Horsford Hall, near Leeds, Sept. 26, 1822.

SIR,

I have for a long time had an anxious wish to examine the question which has so much occupied the minds of agriculturists—*Whether the preference is to be given to the best Hereford Cattle or to the Improved Short-Horns?*

For this purpose, I last year made a tour into the north of England, and am now just returned from a similar journey of five hundred miles through Herefordshire and the adjoining counties. Nothing short of personal examination of the animals in their respective districts, and in their *natural state*, could give me the means of forming an opinion satisfactory to myself; whether it may be satisfactory to your readers may, perhaps be doubted; but if I give it with impartiality, it will, I hope, receive candid attention, and not be commented upon with too great severity.

The animals designated by the title of *Improved Short-horns* are few in number, and they are widely diffused, as they have obtained high prices, and have been carried into various places to ornament many stocks. They have soft, silky, and mossy hair, and are very rich and mellow handlers; handsome and gay in color; elegant in shape, large frames on very short and small bone; level and complete in all their points, and take on fat rapidly. They give a moderate quantity of milk, and do not propagate freely; they attain maturity at a very early period of life, and on this account, as well as from the extreme laziness of their dispositions, they are quite unfit for any labor.

The Herefords are more equal as a class than the improved Short-horns. Their offal is equally fine, many of them handle well, and have a very good quality of meat. They give very little milk, but breed well, and are hardy and healthy. Their color is not attractive, their dispositions are much less placid, their skins thicker and more terse; they, therefore, take on fat less freely, especially at an early age; they do not attain so great a stature in the same number of months, and have never at any period, but particularly in youth, that perfect symmetry which distinguishes the Short-horns. Their hind quarters are very frequently coarse and short; their rumps low, their heads fleshy and heavy, and their breasts scanty and defective; but their shoulders are almost uniformly fine; their neck veins full, their flanks in some few instances good, and their twists generally excellent. I found a vast number with flat sides,

very few with wide hips, and the hair of almost all was very short and harsh.

These, Sir, appear to me, upon a careful examination, to be the distinctions between the two rival breeds. I need scarcely add that I think there is a decided superiority in the Short-horns.

I have every reason to believe that on the same food, and in the same relative circumstances, the Short-horns would be as good at two years old, as the Herefords are at three. If, however, half a dozen of each were committed to the care of the same person, and brought up precisely in the same manner, the result would be highly interesting; and if they were brought up here, I would give the Herefords their food for nothing, if they were the conquerors.

I am well aware that without such a trial, there will continue to be a great difference of opinion on this question; but as my object is truth and usefulness, and not fallacy and controversy, I submit my remarks with every deference, to the judgment of your readers, not being at all anxious to enter into any defence of the opinion I have formed, if it can be proved to be erroneous, as I had no other wish to gratify, or purpose to serve, in making this laborious and extended survey of the two breeds, and in now informing you of the result, than a desire to promote the interest of agriculture.

In the mean time, till the experiment is fairly tried, I must remind your readers that the comparison is not between the excellent breed of Herefordshire and the wretched cattle with *short-horns*, which find their way, very undeservedly, into many parts of the south, but between the best Herefords and that select and valuable breed to which the name of *Improved Short-horns* ought to be exclusively applied.

I am your's, very respectfully,
JAMES ARMITAGE RHODES.

From the Buffalo Patriot, Nov. 26.

Satellites of Venus.—The following singular property of the plain Mirror, is new it is believed, to the philosophical world. It was accidentally discovered by a gentleman a few mornings since, and as the subject may excite much speculation, we give his account of it in his own words.—"Sitting this morning, about gun-fire, with my back to the East, the window being open, and Venus shining brightly into the room, I was surprised to observe two Satellites close to that planet reflected in the mirror which the bearer was holding before me. I turned round immediately and looked at Venus steadily with the naked eye but could not discern them. Again I looked into the mirror with the same success. I then tried another mirror, supposing that the appearance arose from some defect in the glass; but still the two luminous specks, like stars of the sixth magnitude were distinctly visible. If the existence of this extraordinary property of the plain mirror, rivalling in its powers of magnifying, nay, surpassing the first instruments in the hands of the great Herschell himself, be confirmed by the experiments of other more able observers than myself, it is difficult to say what wonderful discoveries may not shortly be made. The satellites of the inferior planets have long been a desideratum in Astronomy, and if the honor of their discovery be reserved for our new Calcutta Observatory, I shall sincerely rejoice that I have been the humble means in the hands of Providence of pointing out the path. There is one thing that puzzles me to account for, unless we have recourse to a new and not improbable theory of optics. I allude to the circumstance of Venus not exhibiting in the mirror her present gibbous appearance, which a very ordinary telescope will show, while the two Satellites are distinctly represented in the speculum, though invisible to the most powerful instrument hitherto made. Those who are acquainted with the distinction between the rays of sensible and rays of radiant heat, will be at no loss to conceive to what I allude. We are as yet but in the infancy of optical science, and light may have many properties which we are now perhaps on the eve of discovery."

THE FARMER.

BOSTON:—SATURDAY, DEC. 28, 1822.

ON SAVING AND MAKING THE MOST OF MANURE.

(*Continued from page* 151.)

In our last number on this subject, we attempted to shew that nearly all the essential constituent parts of all vegetable substances were composed of carbon, hydrogen and oxygen, combined in various proportions, together with azote, which last is found only in some few species of plants. These four bodies, or different kinds of matter, by being differently combined, form the vast variety of vegetable products, which appear to possess not only very different, but opposite qualities, such as sweet, bitter, sour, oily, resinous, glutinous, wholesome, poisonous, &c. &c. As these ideas are probably new to many of our readers, although undoubtedly of great importance, and indeed indispensably requisite for all who would understand the rudiments of the science of agriculture, we shall still farther enlarge upon them. This we are the more readily induced to do on account of the season's inviting to protracted discussion, and the winter evenings presenting leisure both to our readers and ourselves, which might be devoted to less laudable and more unprofitable employments. Besides, we do not give any credence to the maxim of the poet, who says,

"Brevity is always good,
If w' are, or are not, understood."

On the contrary we think, when any matter of science requires to be elucidated, and its first principles explained, in order to pave the way to results of practical utility, it is better to give "line upon line," and run the risque of being censured for redundancy, than to adopt a style more nervous and concise, but less intelligible, and not so well adapted to the capacity of common readers.

A little more or a little less in the proportions of the compounds of carbon, oxygen and hydrogen, causes the wonderful variety of vegetable products. Thus "gum and sugar contain nearly the same principles, and starch differs from them only in containing a little more carbon. These three products are convertible into each other. Thus, in the ripening of grain, the sugar conveyed into it by the sap vessels, coagulates into starch; while in malting the converse takes place, and the starch in grain is converted into sugar, from which ardent spirit results. Part of the carbon combines with oxygen, and escapes in the form of carbonic acid, while the remaining hydrogen and oxygen unite to form alcohol."* Sugar contains, according to Lavoisier, in 100 parts,

28 carbon,
8 hydrogen,
64 oxygen.

Starch, according to Gay Lussac and Thenard, contains,

Carbon, with a small quantity of saline and earthy matter,	-	43,55
Hydrogen,	-	6,77
Oxygen,	-	49,68

Now if we could take from the carbon in starch as set down above 15,55, that is from 43,55 take 15,55, there would remain 28

If we could add to the hydrogen of starch 1,23, or to 6,77 add 1,23 we should have 8

If we could add to the oxygen in starch 14,32, or to 49,68 add 14,32, we should have 64

Thus a little adding and subtracting from the constituent parts of starch, converts starch into sugar, and other vegetable products are capable of being altered or converted from one to the other by similar means. This nature often performs, but art is generally baffled in the attempt. De Saussure, however, has succeeded in converting starch into sugar by boiling the former in water with sulphuric acid, and it is possible that other vegetable products may be conducted through analogous changes, artificially, by chemical processes yet undiscovered. It will not appear at all incredible that a mixture of simple substances should form compounds very different in their properties from the substances before mixture, when we reflect that by melting together potash and sand, glass is produced, and a mixture of muriatic acid [spirit of sea salt] and soda, both very corrosive, forms so mild and salutary an article as table salt.

Barn-yard manure, and other animal and vegetable manures, are composed of the same constituents, viz. carbon, oxygen and hydrogen, as the plants which they nourish. Vegetable or animal substances are of no use as long as these particles or atoms remain locked together, or attached to each other. The putrefactive process unlocks or lets loose their component atoms, and they immediately commence wandering in, and poisoning the atmosphere, unless they light of some substance which has power to absorb them. If these atoms are taken into the lungs of man or beast, the animal receives an injury, which, though perhaps at the time not perceptible, is not the less real. If, however, they are taken in by the absorbent vessels of plants, either in their roots or leaves, the plants convert to their own uses such particles as their necessities may require, and the floating atoms, perhaps recently released from a dead vegetable or animal, become a part of a living plant. It is therefore incumbent on an enlightened agriculturist to sieze the vagrant atoms, and either present them as food for growing crops, or treasure them up for the use of future crops.

The absorbent substances which may be used to advantage for retaining and hoarding up the gases, which constitute the food of plants, are principally WATER and EARTH. Water not only dissolves solid bodies, such as salt, sugar, &c. but likewise attracts and retains in solution gases or steams, such as rise from a dunghill in a state of fermentation. Ammonia, or the volatile alkali, is one of the products which arise from the decomposition of all animal or vegetable substances. When uncombined with water, or any other substance, it exists in a state of gas, and is then so extremely volatile as to exhale at any known temperature. Its volatility is diminished in some degree by combination with water. That fluid has the power of taking up and condensing nearly 670 times its own bulk of ammoniacal gas, or volatile alkali. Carbonic acid gas, which also arises from the putrescence of de-

* *Agricultural Chemistry.*

caying bodies, is absorbed by water, which combines with several times its bulk of that gas. When water is impregnated with these gases it supplies food to plants in great abundance. If we pour water on a heap of stable or cow dung in a state of fermentation, it flows out at the bottom altered in its color, taste and smell. It becomes impregnated with new substances which it has gathered in its passage through the dung hill, and holds in solution the results of the decomposition; and if it be deeply black and putrid it is a certain indication of its being entirely saturated. To suffer this, therefore, to run off without any care or trouble, is most culpable mismanagement, and a flagrant violation of the soundest maxims of rural economy. This putrescent stream is the very essence of manure, and should either be scrupulously confined within the limits of the dung hill, or conveyed to fresh earth that it may impart its nutritive qualities."

The use of water as an absorbent and solvent for manure, is well understood in Europe. "The farmers in Switzerland consider liquid manure as the most efficacious of any, and thence, after the dung is fermented, they dilute it in water, and the liquid alone is carried to the field, and scattered over it. The earth immediately imbibes the liquid, which soon reaches the roots of the plants, and causes a rapid vegetation; whereas it is a long time before dung, in a solid state, fertilizes the soil. The straw that remains, after the dung is thus washed, is applied as manure for potatoes."*

If water is capable of holding the finest and most nutritious particles of manure in solution, it must be a very wasteful practice to suffer manure heaps to be washed by every shower, and the drainings to be conducted into the highways, to flow into a neighboring brook, or what is equally, and in some instances more prejudicial to the interest of the farmer, to make a part of the land so rich as to be unproductive, or at most to yield little but rank weeds, and perhaps grass which lodges before it is half grown, and is wholly or at least partially rotten before it is ripe.

* *Hints as to the Agricultural States of the Netherlands, page 67. Lord Kaimes likewise recommended liquid manure.*

(TO BE CONTINUED.)

EVERLASTING PEA, *Lathyrus latifolius.*

A person living, it is believed, in the State of New York, some time since advertised a quantity of the Everlasting Pea, for sale. A small quantity of said peas are wanted by a gentleman in Boston for seed. They might be forwarded to the care of the Editor of the New England Farmer, Rogers' Buildings, Congress street, Boston, or to some other person in Boston, at the option of the owner. Information, stating where those peas may be had, the price, and readiest mode of conveying them to Boston, would confer a great favor. If the Editor of the Plough Boy would be so good as to take notice of this request, and make it the subject of a paragraph in his useful paper, he would very much oblige *The Editor of the N. E. Farmer.*

FARMER SUMMARY OF NEWS.

CONGRESS.—Nothing of great general interest has yet been transacted by this body. Private petitions, resolves in their incipient stages, and calls on different departments for information, have occupied almost exclusively the attention of both Houses. They appear to be getting their tools in order, and will probably *go to work* as soon as the Christmas holidays are over.

A vessel arrived at New York on the 23d inst. brought London papers to the 6th and Liverpool to the 8th of November. The accounts of the Greek victories are confirmed. It appeared that 15,000 men had been landed at Nafpoli de Romania from the Turkish fleet, which army was subsequently taken and destroyed.

Great processions, feasting, toasting and other similar displays of patriotism have been exhibited in England on account of Mr. Hunt's liberation from prison.

There are rumors respecting some difficulties and disagreements among the principalities and powers, who compose the Congress at Verona; and something is intimated at Paris relative to the Emperor Alexander's returning to his own empire sooner than was anticipated. But these reports have a questionable shape.

The Spanish General Morillo has been arrested by the Constitutional party, and conducted, under a strong guard, to Placentia.

Canova, the celebrated sculptor, died at Venice on the 13th of October, after a short illness.

If we may believe an official account of General Morales, the Colombian army had suffered a very disastrous defeat near Carabuya, on the 13th November.—The following is an extract from the official bulletin, which announces the battle and its results:—"At 11 o'clock, at the distance of about a quarter of a league from this point, the enemy offered us battle, in number 1200 infantry, and 100 cavalry, all veteran troops of the battalions of Bovaca, Mompos, Antioquita, and 4 companies of Carthagenia. They commenced their fire by skirmishing, besides their columns en masse, which gallantly charged ours, and at less than 400 paces, our troops charged with the bayonet, and in spite of the horrible fire of the enemy they charged them with extraordinary decision, valor and enthusiasm. Altho' the shocks were bloody and the resistance great, the rebels were surrounded and completely dispersed, leaving in our hands about 1000 muskets, 800 prisoners, with 36 officers, 100 dead and 160 wounded, two colors and warlike stores. There has also remained in our possession, all the baggage of the enemy, from its chief, to that of the last soldier.—In the midst of so complete a victory, and which will always redound so honorably to our arms, we have to lament the loss of the prudent and brave Col. Don Leon Yturbe, chief of the staff of the army, and the gallant commandant of the battalion of Chasseurs, Gen. Don Josef Gomes del Corco, with 10 officers, 46 soldiers, and 70 wounded.

"For myself, observes the general, I am well, altho' two balls were fired at me by two villains, after they had surrendered, (but which only injured my clothes,) and whom, nevertheless, I suffered to live."

No official intelligence has been received, relative to the proceeding of the Congress of Verona, but the *Journal des Debates* has published an article apparently from authority, in which it was stated, that Alexander had announced to the Congress of Verona, his intention of entirely changing his system with regard to Turkey, and of employing forcible means to compel at last the barbarous government of Constantinople to make concessions.

News has lately been received from the African Colonization Society's new settlement, which is of a favorable nature. The name of this place is Liberia, it is situated on the South West Coast of Africa, near Mescurada. The place is found to be healthy, the colonists contented and prosperous, and a vessel is expected to sail soon, to add to their numbers, and furnish fresh supplies.

The Hon. Dixon Hall, a Member of the Senate of Connecticut, was lately deprived of life in a most distressing manner. Being at his Factory, in Sterling, Conn. he observed a derangement in a band of one of the large drums, connected with the main shaft, and, with the intention of rectifying it, applied his hand, which was caught between the band and drum. His body was drawn with irresistible violence through an opening of ten inches in diameter, crushing the bones, and instantly depriving him of life.

A Challenge.—A "Vermont Yankee" has published a challenge to run a horse which is owned in Vermont, against any in Virginia for $5000. "A Horse! a horse! my Kingdom for a horse!"

Several women have lost property in Philadelphia, in consequence of their reticules being snatched from them by robbers in the streets.

Quebec.—585 vessels arrived at Quebec the past season, bringing 10,471 emigrants.

The Rev. Dr. Allen, President of Bowdoin College, has now in type a work on Shipwrecks, comprising about 350 pages octavo, for the benevolent purpose of distribution among mariners.

Two thousand dollars have been subscribed in this city for the benefit of the family of the brave Lt. Allen, who was killed by the pirates.

Two lads, sons of Major C. Leppit, one aged about 12 years, the other 6, in sliding down a hill in Jewett's City, (Con.) both seated on the same sled, were carried into the ice of an adjacent river, which gave way. The eldest caught his brother by one arm, swam to the edge of the ice, and placed him on it by a great effort. They were both rescued by a person in the neighborhood, who was attracted, by their cries, to the spot.

The Hartford Times states that a cabbage head was raised in East Granville, Mass. the past season, which measured, after all the loose leaves were taken from it, three feet 5 1-2 inches in circumference, and an apple, which weighed one pound 7 ounces.

American Wine.—A gentleman near Georgetown, (D. C.) has planted a small vineyard of about 5 acres. The vines are planted in rows, 12 feet apart, and 5 feet distant in the rows. Only one acre has begun to bear, and that produced about 390 gallons of wine the past season. A bushel of clusters of grapes yields 3 gallons of juice, and 3 vines produce, on an average, a little short of a bushel of clusters. These vines were put into a nursery in 1819, transplanted where they now stand in 1820, and began to bear in 1822.

Mr. Jonathan Smith, of this town, killed a swine last week, which he procured in April last from Captain Northey's farm in Boxford, and which then weighed about 30 lbs.; when killed, it was just ten months old, and weighed 353 lbs.—*Salem Gazette.*

An attempt was made to rob the mail on the 13th inst. near Petersburg, in Virginia. Logs were placed in the road so as to stop the stage, and three men made their appearance, one of whom presented a double barreled gun at the driver, calling upon him to deliver the mail, which the driver promised to do on condition of his life being spared. The driver caught the gun, and as the robber struggled to draw it back, struck him with a whip in the face, and by putting his horses to full speed, saved the mail.

Great Dealings.—A letter has been received from the acting Governor of the State of Ohio, directed to the Governor of the State of Pennsylvania, containing an offer from the former to exchange a map of Ohio for a map of Pennsylvania. The letter of the Ohio Governor caused a good deal of laughter in the House of Representatives on account of the trifling and trafficing nature of the proposition.

Government has purchased for 35,000 dollars, a steam-boat, which plies between Washington and Norfolk, to be employed against pirates.

The Dwelling House of Mr. Levi Scott, in Machias, with all his provisions, and most of his clothing and furniture, were destroyed by fire on the 7th inst.

William Berry, an American, was lately stabbed in the thigh by a Spaniard, at a house of ill fame in Newbern, N. C. in such a manner that he survived but a short time.

A fire broke out on the evening of the 15th inst. in Philadelphia, on Flintham's-wharf, between Race and Vine Streets, which destroyed two block-maker's shops, a cooper's shop, and some other buildings, when its progress was arrested by the activity of the firemen.

State Moral Society.—At a convention of delegates from several moral societies in the state of New-York, held in the city of Albany, the 16th January, 1822, David Burhans, Esq. of the town of Bethlehem, Elisha Putnam, of the city of Albany, William Aikin, of the town of Greenbush, Rev. Thomas Holliday, of New Scotland, John L. Viele, Esq. of the village of Waterford, John Lincklaen, Esq. of Cazenovia, and Jacob Hees, Esq. of Canajoharie, were appointed a standing committee for the ensuing year.

It was moreover resolved, that another convention be called, to meet in the city of Albany, on the last Wednesday of January, 1823: that the standing committee be directed to make the arrangements for the same: that the Rev. Thomas Holliday be requested to deliver the sermon before said convention; and that the Rev. Elisha Yale, of Kingsborough, in the county of Montgomery, be appointed his substitute.—*Albany Da. Adv.*

BY T. G. FESSENDEN.

There is nothing better for a man than that he should eat and drink, and enjoy good in his labor.
Eccl. ii, 24.

With thankful heart to eat and drink,
Be happy while you can,
And reap the produce of your toil,
Is God's behest to man.

And he who thankfully enjoys
Each boon, which life affords,
With scant subsistence is more blest
Than misers with their hoards.

For only what we rightly use
Is really our own;
The rest is yielded to the winds,
Or left to heirs unknown.

Yet many a miser makes himself
A wretched guilty slave;
Although he cannot tell for whom
He toils and plays the knave.

Both soul and body he devotes
To Mammon and to care,
And gains alone the paltry post
Of steward to his heir.

To give some graceless wretch a chance
To dissipate his pelf,
He plots and labors till he brings
Damnation on himself.

With temperance then to eat and drink,
Be happy while you can;
Enjoy the produce of your toil,
Is Heaven's behest to man.

A man is always in a hurry to defend his weak side; and it is in some degree pleading guilty to be over hasty and solicitous in making a defence.

A man who is proud of his property will sometimes call himself poor that you may sooth his vanity by contradicting him. A great beauty, likewise, will pretend to believe that she makes an ordinary appearance, and

"In hopes of contradiction, oft will say,
"Methinks I look most dreadfully to day."

The most effectual way to mortify such persons is to pretend to believe them, and to acknowledge that there is some truth in their assertions.

When pleasure is a man's chief object, disappointment and vexation are his principal acquisitions. Intervals of lassitude will occur, which inflict punishment more heavy than justice would impose on the vilest criminal.

Some men in pursuit of pleasure despatch the senses, which are the only inlets to the enjoyments they are in quest of. They roar bachanalian songs till deaf, smoke till blind, and drink till they have almost as little sensation as the clods of the valley.

"In wild excess the vulgar breast takes fire,
'Till buried in debauch the bliss expire."

If a despot should order men to punish themselves in that way he would justly be deemed a most terrible tyrant.

Those who in confidence of superior capacities or attainments, disregard the common maxims of life, should remember that nothing can atone for the want of prudence; that negligence and irregularity, long continued, will make knowledge useless, wit ridiculous, and genius contemptible.

From the Albany Daily Advertiser.

Geological survey.—The geological and agricultural survey of the Erie Canal route, undertaken under the patronage of the Hon. Stephen Van Rensselaer, having excited considerable expectation, it may be gratifying to our readers to learn the following particulars:—

The geological outline, proposed to be taken this season, has been attempted with some success. But the heavy and long continued rains, prevented Professor Eaton, and his assistants from proceeding any farther than Rochester. So far they traced the connected series of rock formation with the primitive rocks of New England. Excepting that the rocks constituting the Little Falls, and the Great and Little Noses, present such abrupt protrusions of a primitive stratum into a secondary district, that these localities require renewed and very particular examination.

The examination of the route, through to Lake Erie, will be made with particular care, during the next season. We believe the result of this survey is to be published in two parts: the first part (in about a year) will contain the geological part, embracing all the interesting mineralogical localities; together with those rules for ascertaining the true indications of the useful minerals, which are deduced from the experience and observations of distinguished geologists and miners. The second part (to be published in about two years) will contain the agricultural part. It will embrace a digest of all the experience which can be collected from the best practical farmers of the west. Also, complete analyses of all the varieties of soil, with their particular requisites, defects and excellencies. The indigenous plants along the whole route, will be carefully analyzed, and their scientific, as well as common English names will be given; together with the general qualities of each.

A small pamphlet will soon be published, copies of which will be distributed along the route, giving particular directions to those who may feel disposed to lend their assistance in aid of those practical sciences, which have a direct influence upon the well being of every individual in the community.

The remarkable exemption of the steam ship Robert Fulton from sickness, notwithstanding her frequent passage to and from New Orleans, Havana, and New York, is to be ascribed principally to the smoke, or the acid of smoke, called in chemical language the *pyroligneous acid*. The efficacy of smoke in destroying contagion has been tested on various occasions, particularly by Dr. Lind, who had a long and extensive experience on shipboard in tropical climates. The unusual healthiness of the crew of Capt. Cook, in the barque Endeavor, in her voyage round the world, may be brought as another instance of the salutary effect of smoke in the prevention of disease. During this voyage through various latitudes both of the frigid and torrid zone, out of a company of more than 120, and during a three years cruize, there were only four deaths, three of which were from accidents, and the other from consumption of the lungs. It was the frequent practice of Capt. Cook to kindle a fire in the well, at the bottom of the hold. In this way, the smoke penetrated every part of the hold of the vessel, and the foul air being at this time rarified by the heat, was expelled in a great degree, and that which remained was purified by the action of the smoke, or the pyroligneous acid. Numerous instances might be adduced in illustration of this subject; but, as newspaper essays require to be short, what has been said may be sufficient. The writer, at some other time, will take occasion to show the efficacy of growing trees and vegetation of all kinds as a preventive against summer and autumn diseases, and will also point out the economy of nature in balancing the antidote to the bane of human life.—*Cahawba Press.*

That milk is often adulterated, or diluted with water, before it is delivered to customers, we believe there is no doubt. Indeed, we have been well informed that there are persons who *buy to sell again*, and who sell *at the same price for which they buy*; relying for their *profit* upon the quantity of *water* which they can sell with it. It is an easy matter, however, for every consumer to ascertain whether he is imposed upon by adulterated milk: put a tumbler full in a situation exposed to the atmosphere; as milk and water freeze at different temperatures, they will therefore separate in the act of freezing, and the quantity of each can easily be ascertained.—*N. Y. Spectator.*

Bread.—The following important improvement in the composition of bread, the essential staff of life, deserves the attention of the community. It has lately been introduced into a respectable family in this city, and is pronounced superior to any other. Independent of a great saving, the bread is spungy, light and remarkably sweet.——1st. Take equal quantities of mealy potatoes and superfine flour.—2d. Peal and boil them, using the same water to mash them in; which should be done as fine as flour. —3d. Add, (for three common loaves,) a table spoonful of fine salt, and sufficient yeast.—4th. Mix the bread, and let it rise: bake it about one hour gradually.—*Albany paper.*

Sun Fish.—A fish of this rather uncommon species was caught, about a month ago, on the north of Shetland, and has been brought home by Captain Wilkinson, of the Greenland ship Mary Frances, of Hull. This fish, according to Dr. Shaw, is a native of the European seas, and from the singularity of its aspect, has long since attracted the particular observations of naturalists. Its general appearance rather represents the head of some large fish, than a complete animal, the body being short, and terminating abruptly on the hind part. Its skin is rough, and it is supposed to feed principally upon shell fish. During the night it exhibits a high degree of phosphoric splendor, from which, and its almost circular form, it has probably derived its name. The present specimen is about three feet four inches in length, and about two feet broad;—and its head bears no very distant resemblance to the countenance of an old man in a state of frightful distortion. This fish is sometimes observed to lie on its side, upon the surface of the water, and when taken it was in this situation. In the northern seas it is said to arrive to a vast size, and to have been found 8 or 10 feet in length, and of the weight of 500 pounds.—*London paper.*